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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,070	09/09/2003	Michael Seul	FRAC-US-C1	4065
7590 Bioarray Solutions 35 Technology Drive Warren, NJ 07059			EXAMINER VATHYAM, SUREKHA	
			ART UNIT	PAPER NUMBER

1753

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/658,070	Applicant(s) SEUL ET AL.	
	Examiner Surekha Vathyam	Art Unit 1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>09/09/03, 12/22/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 371 as detailed in the notice regarding benefit/priority claim(s) mailed on 03/29/04.

Information Disclosure Statement

2. The information disclosure statement filed 12/29/03 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show streptavidin in red (page 10, paragraph beginning with the word "Fig. 12", line 3 of the paragraph) and biotin functionality in turquoise (page 10, paragraph beginning with the word "Fig. 12", line 5 of the paragraph) as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: throughout the specification, the line numbers indicated on the left hand side margin, do not match with the actual line numbers of the text with the mismatch getting incrementally worse down the page.

Appropriate correction is required.

5. The disclosure is objected to because of the following informalities: page 4, paragraph beginning with the words "The present invention provides a method...", line 2 of the paragraph, uses the term "relaxation frequency" for the first time and does not define the term.

Appropriate correction is required.

6. The disclosure is objected to because of the following informalities: page 5, line 6, has the phrase "applied electric resulting in" which should be corrected to "applied electric field resulting in".

Appropriate correction is required.

7. The disclosure is objected to because of the following informalities: page 6, paragraph beginning with the word "Accordingly", line 9 of the paragraph, uses the symbol ω with no explanation provided for the meaning of the symbol.

Appropriate correction is required.

Claim Objections

8. Claims 1 – 12 are objected to because of the following informalities:
Independent claim 1 recites the limitation "the first plane" in line 2 of the claim. There is

insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1 – 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. Claims 1, 3 – 5, 9, 13, 15, 21 and 23 recite the limitation "the relaxation frequency" in each of the claims mentioned. There is insufficient antecedent basis for this limitation in the claim. Please note that the term "relaxation frequency" is not defined in the specification either.

Double Patenting

12. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

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13. Claim 26 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 23 of prior U.S. Patent No. 6,706,163. This is a double patenting rejection.

Instant claim 26 (when properly construed as including all the limitations of instant claim 23) has the same scope as claim 23 of US 6,706,163. While slight wording differences exist, neither claim can reasonably be infringed without infringing the other.

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 1 – 27 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 – 8, 10 – 11, 13 – 16, 18 – 19, 21 – 27 and 29 of U.S. Patent No. 6,706,163. A one-way test for obviousness-type double patenting has been applied, as the application for US patent No. 7,014,747 was filed earlier than the instant application. Although the conflicting claims are not identical, they are not patentably distinct from each other because the indicated claims of U.S.

Patent No. 6,706,163 include all the limitations of the corresponding indicated instant claims as described below.

Claim 1 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 1 of US 6,706,163. Claim 1 of Seul ('163) includes all the limitations of instant claim 1.

Claim 2 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 2 of US 6,706,163. Claim 2 of Seul ('163) includes all the limitations of instant claim 2.

Claim 3 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 3 of US 6,706,163. Claim 3 of Seul ('163) includes all the limitations of instant claim 3.

Claim 4 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 4 of US 6,706,163. Claim 4 of Seul ('163) includes all the limitations of instant claim 4.

Claim 5 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 5 of US 6,706,163. Claim 5 of Seul ('163) includes all the limitations of instant claim 5.

Claim 6 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 6 of US 6,706,163. Claim 6 of Seul ('163) includes all the limitations of instant claim 6.

Claim 7 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 7 of US 6,706,163. Claim 7 of Seul ('163) includes all the limitations of instant claim 7.

Claim 8 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 8 of US 6,706,163. Claim 8 of Seul ('163) includes all the limitations of instant claim 8.

Claim 9 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 10 of US 6,706,163. Claim 10 of Seul ('163) includes all the limitations of instant claim 9.

Claim 10 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 11 of US 6,706,163. Claim 11 of Seul ('163) includes all the limitations of instant claim 10.

Claim 11 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 1 of US 6,706,163. Claim 11 of Seul ('163) includes all the limitations of instant claim 1.

Claim 12 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 13 of US 6,706,163. Claim 13 of Seul ('163) includes all the limitations of instant claim 12.

Claim 13 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 14 of US 6,706,163. Claim 14 of Seul ('163) includes all the limitations of instant claim 13.

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Claim 14 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 15 of US 6,706,163. Claim 15 of Seul ('163) includes all the limitations of instant claim 14.

Claim 15 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 16 of US 6,706,163. Claim 15 depends from claim 13. While claim 16 of Seul ('163) discloses all the limitations of parent claim 13, the further limitation of instant dependent claim 15 are not explicitly disclosed. Specifically, it is not disclosed that the highest frequency of electric field at which array formation takes place, determines the relaxation frequency. However, typical AC current is of a single frequency and therefore it would have been obvious to one of ordinary skill in the art for the frequency to have been a single frequency and therefore the highest frequency.

Claim 16 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 18 of US 6,706,163. Claim 18 of Seul ('163) includes all the limitations of instant claim 16.

Claim 17 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 19 of US 6,706,163. Claim 19 of Seul ('163) includes all the limitations of instant claim 17.

Claim 18 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 21 of US 6,706,163. Claim 21 of Seul ('163) includes all the limitations of instant claim 18.

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Claim 19 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 14 of US 6,706,163. Claim 14 of Seul ('163) includes all the limitations of instant claim 19.

Claim 20 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 22 of US 6,706,163. Claim 22 of Seul ('163) includes all the limitations of instant claim 20.

Claim 21 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 23 of US 6,706,163. Claim 23 of Seul ('163) includes all the limitations of instant claim 21.

Claim 22 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 24 of US 6,706,163. Claim 24 of Seul ('163) includes all the limitations of instant claim 22.

Claim 23 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 25 of US 6,706,163. Claim 25 of Seul ('163) includes all the limitations of instant claim 23.

Claim 24 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 26 of US 6,706,163. Claim 26 of Seul ('163) includes all the limitations of instant claim 24.

Claim 25 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 27 of US 6,706,163. Claim 27 of Seul ('163) includes all the limitations of instant claim 25.

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Claim 26 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 23 of US 6,706,163. Claim 23 of Seul ('163) includes all the limitations of instant claim 26.

Claim 27 is rejected under the doctrine of obviousness-type double patenting as being unpatentable over claim 29 of US 6,706,163. Claim 29 of Seul ('163) includes all the limitations of instant claim 27.

Conclusion

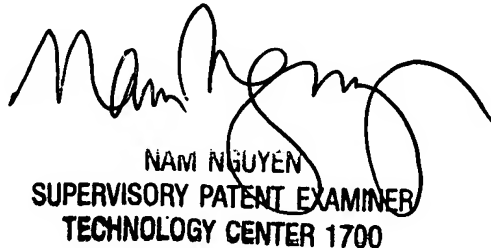
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Surekha Vathyam whose telephone number is 571-272-2682. The examiner can normally be reached on 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SV
November 28, 2006



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